American Computer Science League

2003-2004

All-Star Contest

Problem #4

ACSL DOMINOES

PROBLEM: The game of ACSL dominoes is played with 28 rectangular tiles. The object of the game is to match all your tiles to the open ends of played tiles before your opponent. Each tile has a digit at each end. Real dominoes use dots. The digits range in value from 0 to 6. The tiles will be described using ordered pairs. The ordered pairs will range from (0,0) to (6,6). The tile below in figure 'a' is (2,3). The tile (3,2) is the same as tile (2,3) since either end of the tile can be used to match an adjacent tile as shown in figure 'b'.



In this problem you will be asked to insert your tiles into the blank spaces of an existing game

53	3 4	4 5	56	66	6 1	1 3	3 6	6 2	2 5
1									

INPUT: There will be 10 input lines. Each line will contain 5 location numbers, the 5 ordered pair tile names, in left-right order, for the dominos at those locations and 5 ordered pairs that describe the 5 domino tiles in your hand.

OUTPUT: For each input line print the tile, in left-right order, and its location so that all the tiles are successfully placed in the spaces. The sample data #1 below describes the game above and tiles (6,6), (3,4), (2,5), (3,6) and (6,2) must be fitted into the blank spaces. The solution is given by sample output #1. The left-right pairs and their locations can be printed in any order. If the tiles can't be successfully placed in the spaces, print "CAN'T BE DONE". We guarantee all solutions will be unique.

SAMPLE INPUT	SAMPLE OUTPUT		
 1,3,4,6,7,5,3,4,5,5,6,6,1,1,3,6,6,3,4,2,5,3,6,6,2 1,3,4,6,7,5,3,4,5,5,6,6,1,1,3,6,6,4,3,5,2,6,3,2,6 	1. 3,4,2 6,6,5	2. 3,4,2 6,6,5	
2. 1,5,4,0,7,5,5,4,5,5,0,0,1,1,5,0,0,4,5,5,2,0,5,2,0	3,6,8 6,2,9	3,6,8 6,2,9	
	2,5,10	2,5,10	